

WHAT IS CLAIMED IS:

1 1. A compressor comprising:

2 a compressor mechanism, said compressor mechanism having a
3 function for compressing and vomiting a refrigerator, and

4 a motor driving said compression mechanism;

5 wherein said motor includes a stator core having a plurality of teeth
6 parts, a concentrated winding applied over each teeth part of said plurality of teeth
7 parts and a rotor incorporating a plurality of permanent magnets;

8 said stator core is formed in an annular form by combining said
9 plurality of core elements, and

10 each of said plurality of permanent magnets is provided at a larger
11 pitch than the stator coil pitch.

1 2. The compressor of claim 1, wherein said rotor further
2 includes an iron as a flux of magnetic induction, said iron being disposed between
3 said each permanent magnet.

1 3. A compressor comprising:

2 a compression mechanism, said compressor mechanism having a
3 function for compressing and vomiting a refrigerator, and

4 a motor driving said compression mechanism,

5 wherein said motor includes a stator core having a plurality of teeth
6 parts, a concentrated winding applied over each teeth part of said plurality of teeth
7 parts and a rotor incorporating a plurality of permanent magnets,

8 said stator core is formed in an annular form by combining said
9 plurality of core elements, and

10 each of said plurality of permanent magnets is provided at a larger
11 pitch than the stator coil pitch.

1 4. The compressor of claim 3 wherein said each teeth part
2 includes an outer circumference part, and said each teeth part is combined by
3 fitting parts disposed at end portion of said outer circumference part.

1 5. A compressor comprising:
2 a compression mechanism, said compressor mechanism having a
3 function for compressing and vomiting a refrigerator, and

4 a motor driving said compression mechanism,

5 wherein said motor includes a stator core having a plurality of teeth
6 parts, a concentrated winding applied over each teeth part of said plurality of teeth
7 parts and a rotor incorporating a plurality of permanent magnets,

8 each of said plurality of permanent magnets is provided at a larger
9 pitch than the stator coil pitch,

10 said plurality of permanent magnet are arranged around a center
11 thereof,

at least one of said plurality of permanent magnets has a magnet forward portion and a magnet backward portion each having respective surfaces facing said stator core and angled toward each other.

6. A compressor comprising:

a compression mechanism, said compressor mechanism having a function for compressing and vomiting a refrigerator, and

a motor driving said compression mechanism,

wherein said motor includes a stator core having a plurality of teeth parts, a concentrated winding applied over each teeth part of said plurality of teeth parts and a rotor incorporating a plurality of permanent magnets,

each of said plurality of permanent magnets is provided at a larger pitch than the stator coil pitch,

said plurality of permanent magnet are arranged around a center thereof, and

at least one of said plurality of permanent magnets has a side facing said stator core which is indented inward towards the center.

7. A compressor comprising:

a compression mechanism, said compressor mechanism having a function for compressing and vomiting a refrigerator, and

a motor driving said compression mechanism,

5 wherein said motor includes a stator core having a plurality of teeth
6 parts, a concentrated winding applied over each teeth part of said plurality of teeth
7 parts and a rotor incorporating a plurality of permanent magnets,

8 each of said plurality of permanent magnets is provided at a larger
9 pitch than the stator coil pitch, and

10 a first outer periphery portion of said rotor is different shape than a
11 second outer periphery portion of said rotor without said second outer periphery
12 portion being situated directly between any of said magnet.

1 8. An air-conditioner comprising:

2 a compressor of claim 1,

3 a heat exchanger, and

4 a refrigerating cycle connecting said compressor and said heat
5 exchanger.

1 9. A refrigerator comprising:

2 a compressor of claim 1,

3 a heat exchanger, and

4 a refrigerating cycle connecting said compressor and said heat
5 exchanger.